# TFT LCD MONITOR

## USER MANUAL

Series – LED Back Light

LCD104AVL

LCD121AVL

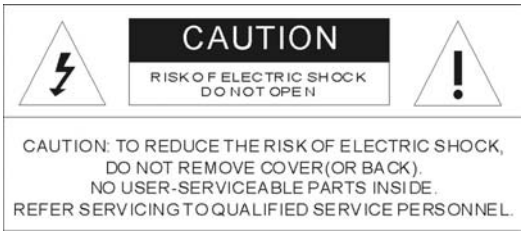
LCD191AVL

**WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

**CAUTION:**


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**Explanation of Graphical Symbols**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage” within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**Precautions**

**Safety----------**

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on surfaces(rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

**Installation----------**

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

**Cleaning----------**

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

# Safety Precautions

## Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

● You are cautioned that changes or modifications not expressly approved by that party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received including interference that may cause undesired

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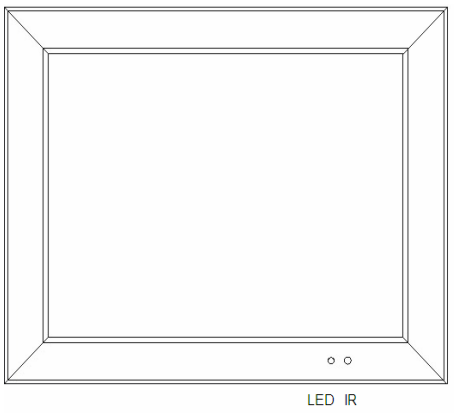
## Features

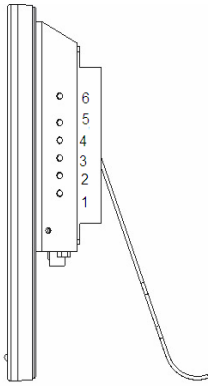
- Special Video Processor.
- PIP Control Function (Only PC/Video).
- Screen protector (Anti-blur /Image auto move).
- NTSC/PAL Auto Switch.
- 3D De-interlace Technology.
- 3D Comb Filter Technology.
- Automatic Colour Control and Colour Killer.
- Luminance transient improvement (LTI),Chrominance transient improvement (CTI)
- Directional zoom engine.
- Video out support auto termination (75 Ohms).
- Build-in 2W+2W speaker
- Support IR remote controller.
- VESA standard bracket 75/100mm .
- Wall mountable capability.

# Operating Instructions-Control

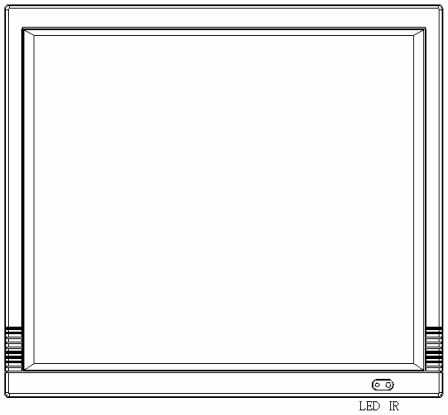
Frame type:

10.4”/12.1”




19”




**Key Board**

**1. Power**

Push to turn on and turn off the unit.

LED Green light: Power on

LED Red light: Standby mode.

**2. 3. Adjust ◁ / ▷**

Increase or decrease the value on OSD menu.

◁ Used as UP or Increase value on the OSD Menu.

▷ Used as DOWN or Decrease value on the OSD Menu

**4. Item/Select**

Hot key selection for < Brightness/Contrast/Backlight/ Sharpness/Hue/Colour /Volume > function OSD menu.

**5. Menu/Function**

Push to call out OSD menu.

Used as Confirm / OK function in OSD menu.

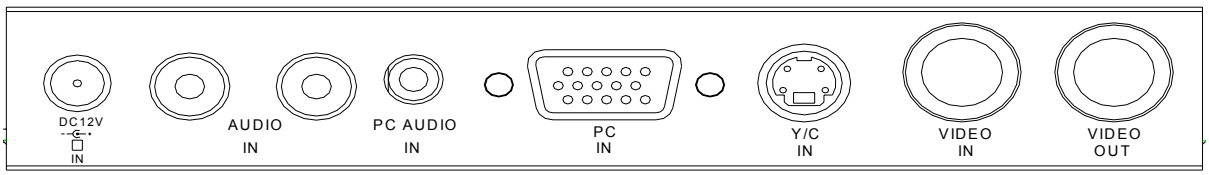
**6. Source**

SDE: Select input signal from AV1, S-Video or PC.

Used as "Return/Exit" function in OSD menu

***Push “Menu” and “Up” into key-lock mode, and push again into unlock.***

## Connection: SDE Series




1 2 3 4 5 6

1: Regulated DC12V Power Input

2: AUDIO R/L In

Audio Signal Input, this input is for Video and Y/C.

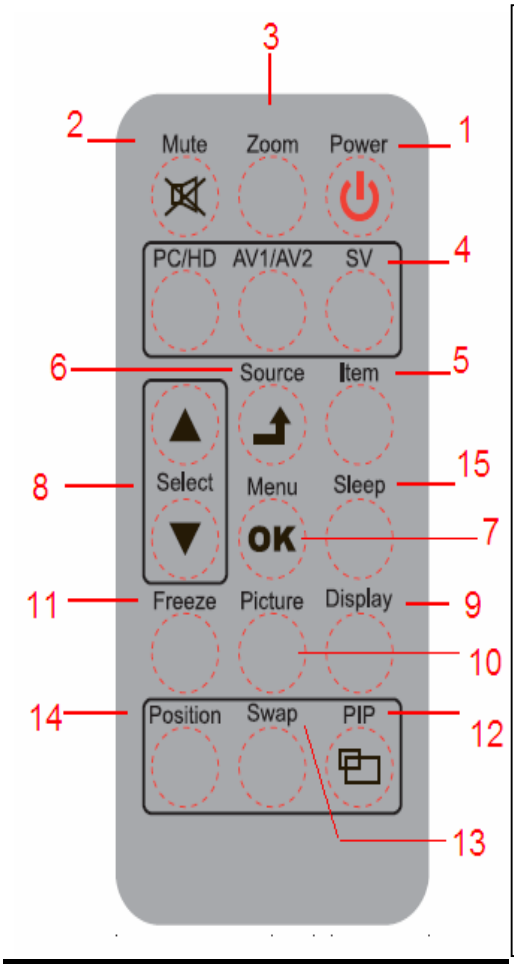
3: PC AUDIO IN

4: PC IN

5: Y/C IN (S-Video)

6: Video IN/OUT

## Remote control operation




**1:Power**：Push to turn on and turn off the unit.
**2:Mute**：Disable the unit's sound output, press the button again or the Volume +/- button to restore the volume.
**3:Zoom** : Toggle between the image ratios. (4:3/16:9/14:9/Movie/Panorama)
**4:PC/HD,AV1/AV2,SV**：Press to choose the desired signal source directly.
**5:Item**：As hot key selection for Brightness/Contrast/ Backlight/Sharpness/Hue/Colour /Volume > adjust
**6:Source/(Exit)**：Push to select input signal. Used as "Return/Exit" function in OSD menu.
**7:OK/Menu**：Push to call out OSD menu. Used as "Confirm / OK" function in OSD menu.
**8:Select▲/▼**：Change the function up or down.
**9:Display**：Press to display the information on the screen, such as resolution, signal source .
**10:Picture**: Toggle between the different picture modes. Standard /Soft/Personal /Bright.
**11:Freeze**: Press to freeze the picture(AV1,AV2,SVideo), press again to restore.
**12:PIP**：Press to activate the PIP function and select the size of sub-picture Small/Medium/Large/1+1/Off. Off means PIP function is turned off.

**13:Swap**：In the PIP mode, press the button to switch the main picture and sub-picture.（This function works only when sub-picture exists.）
**14:Position**：PIP mode Press to select the position of sub-picture.（4 corners and centre）
**15: Sleep:** Select the Automatic turn off time.

# OSD Function

## Source

Push <**Source**>button to selection the channel.
SDE series: AV/SVIDEO/PC

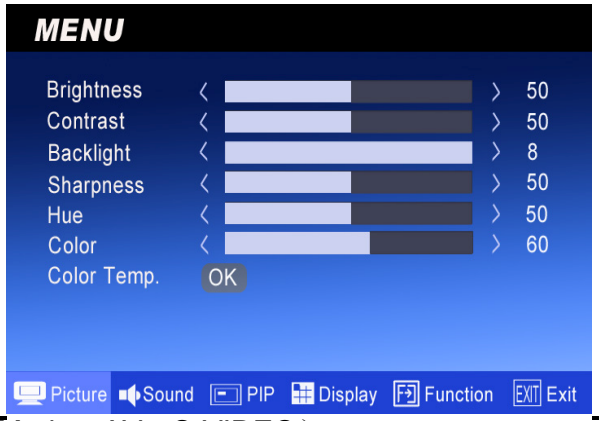
## Item (Hot key, simple operation)

Use < **Item** >button as hot key to call out Adjust bar. Then use +/- button to increase/decrease the menu bar.( Brightness/Contrast/Backlight/Sharpness/Hue/Colour /Volume)

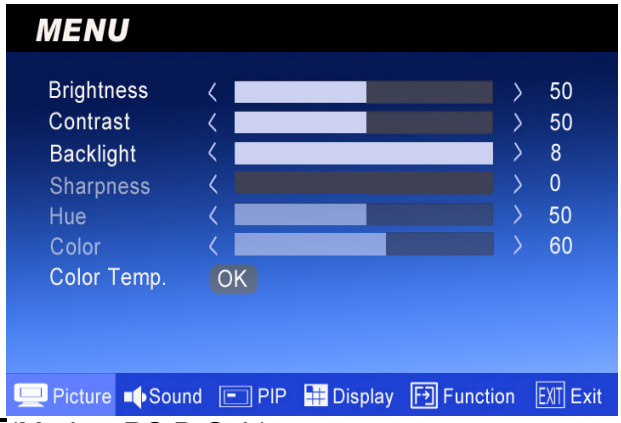
## OSD Menu

Push <**Menu**>button to display the **Main menu.**
Main menu includes (Picture)、(Sound)、(PIP)、(Display) 、(Function) and (Exit) 6 categories.
Use **Select** (▲▼) button to select the function category to be adjusted.
Push the **Menu/OK** button to enter the selected category.

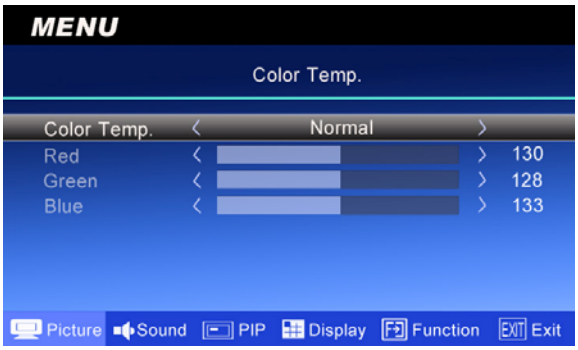
### 1. PICTURE




（Mode：AV、S-VIDEO）




(Mode：PC D-Sub)

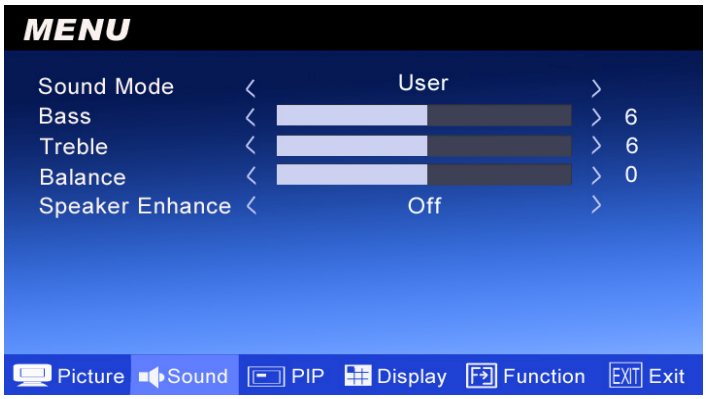



（**Colour Temp**.）

Use **Select** (▲▼) button to select the item to be adjusted.
Push <**Menu>** to confirm the selected item;
use **Select** (▲▼) button to adjust and then push <**Source**> button to return.

| MENU | FUNCTION | MODE |
|---|---|---|
| Brightness | Use Select (▲▼) button to increase/decrease the screen brightness. | all |
| Contrast | Use Select (▲▼) button to increase/decrease the screen contrast. | all |
| Back light | Use Select (▲▼) button to increase/decrease the screen backlight. | all |
| Sharpness | Use Select (▲▼) button to adjust the sharpness of the image. | AV/S-video |
| Hue | Use Select (▲▼) button to adjust the hue of the image. | AV/S-video |
| Colour | Use Select (▲▼) button to increase/decrease the image colour saturation. | AV/S-video |
| Colour Temp. | Use Select (▲▼) button to select the desired colour temperature. There are **Normal / Warmer / Warm / Cool / Cooler / User** 6 modes. In User mode, push <MENU> button to enter and adjust the **Red/Green/Blue** colour separately. | all |

## 2. SOUND




Use **Select** (▲▼) button to select the item to be adjusted. Push **Menu** to confirm the selected item, use **Select** (▲▼) button to adjust and then push <**Source**> button to return.

| MENU | FUNCTION | MODE |
|---|---|---|
| Sound Mode | Use Select（▲） （▼）button to select **Theatre//Music/News/Original/User** 5 kinds of modes. | all |
| Bass | Use Select（▲） （▼）button to adjust the Bass. | all |
| Treble | Use Select（▲） （▼）button to adjust the Treble. | all |
| Balance | Use Select（▲） （▼）button to adjust the left / right balance. | all |
| Speaker Enhance | Use Select（▲） （▼）button to select On/Off | all |

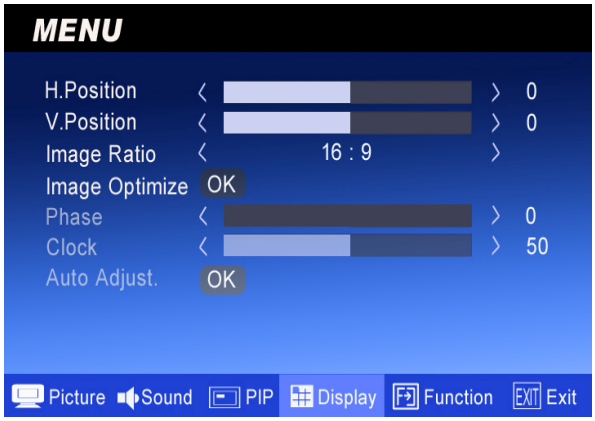
## 3. PIP

Use **Select** (▲▼) button to select the item to be adjusted. Push **Menu** to confirm the selected item, use **Select** (▲▼) button to adjust and then push <**Source**> button to return.

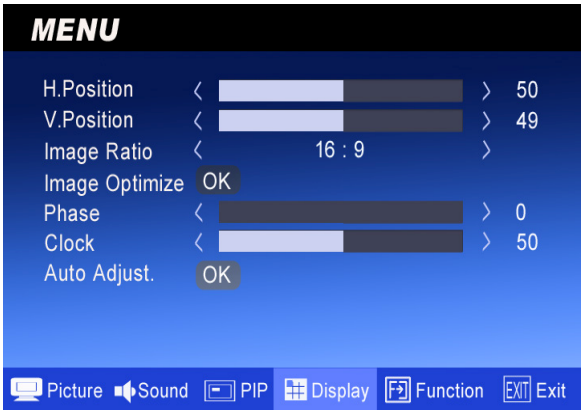
| MENU | FUNCTION |
|---|---|
| PIP Source | Use Select (▲▼) button to select the source of sub-picture. |
| PIP Size | Use Select (▲▼) button to select the size of sub-picture<br>Small/Medium/Large/1+1/Off. Off means PIP function is turned off. |
| PIP Swap | Push <MENU> button to switch the main picture and sub-picture. (This function works only when sub-picture exists ) |
| PIP Position | Use Select (▲▼) button to select the position of sub-picture(0~5)<br>4 corners and center.(This function works only when sub-picture exists) |

## 4. Display

Use **Select** (▲▼) button to select the item to be adjusted. Push **Menu** to confirm the selected item , use **Select** (▲▼) button to adjust and then push <**Source**> button to return.



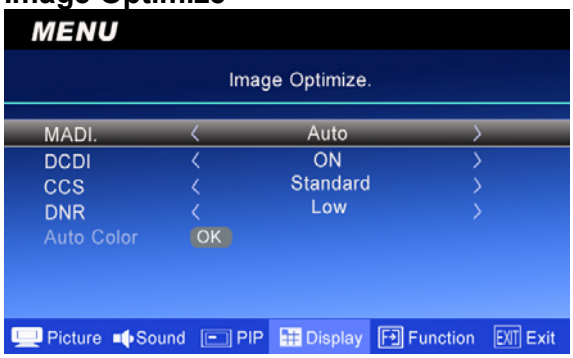

（Mode：AV、S-VIDEO）



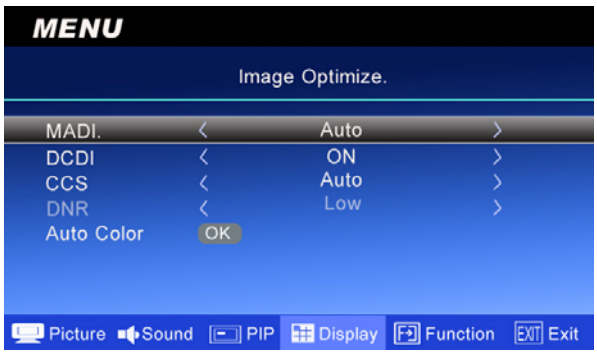

(Mode：PC D-Sub)

| MENU | FUNCTION | MODE |
|---|---|---|
| H. Position | Use Select (▲▼) button to adjust the horizontal position of the image. | all |
| V. Position | Use Select (▲▼) button to adjust the vertical position of the image. | all |
| Image Ratio | Use Select (▲▼) button to select the image ratio.<br>PC mode : 4:3/16:9<br>AV/S-VIDEO mode : 4:3/16:9/14:9/Movie/Panorama | all |
| Image Optimize | Push <MENU> button to enter the sub-menu and use Select (▲▼) button to adjust/select | all |
| Phase | Use Select (▲▼) button to increase/decrease the noise on the screen. | PC |
| Clock | Use Select (▲▼) button to increase/decrease the snowflake noise on the screen. | PC |
| Auto Adjust | Push <MENU> button to adjust the best image. | PC |

**Image Optimize**




（Mode：AV、S-VIDEO,HD）

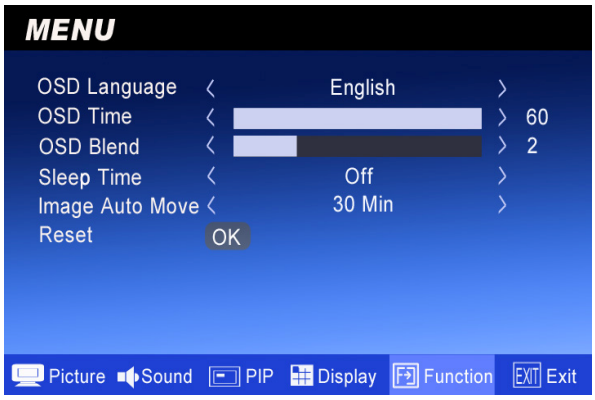



(Mode：PC D-Sub)

| MENU | FUNCTION | MODE |
|---|---|---|
| MADI | Use Select (▲▼) button to select Auto/Off/Standard 3 kinds of modes. | all |
| DCDI | Use Select (▲▼) button to select On/Off. | all |
| CCS | Use Select (▲▼) button to select Auto/Off/Standard 3 kinds of modes. | all |
| DNR | Use Select (▲▼) button to select Low/ Medium/ High/ Off 4 kinds of modes. | AV/S-video |
| Auto Color | Push <MENU> button to adjust the best image colour. | PC |

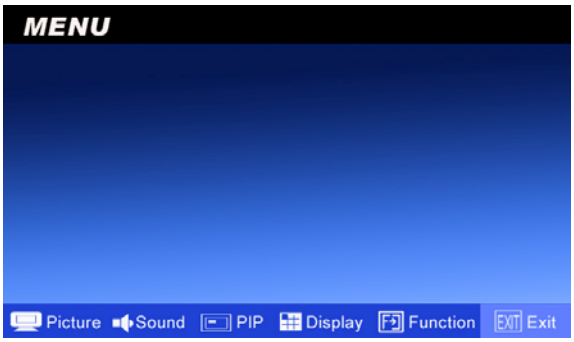
## 5. Function

Use **Select** (▲▼) button to select the item to be adjusted. Push **MENU** to confirm the selected item, Use **Select** (▲▼) button to adjust and then push <**Source**> button to return.




| MENU | FUNCTION | MODE |
|---|---|---|
| OSD Language | Use Select (▲▼)button to select the desired language. | all |
| OSD Time | Use Select (▲▼) button to increase/decrease the OSD display time. | all |
| OSD Blend | Use Select (▲▼) button to increase/decrease the transparent degree of the OSD display. | all |
| Sleep Time | Use Select (▲▼) button to select the automatic turn off time.<br>Off/10/20/30/60/90/120/150/180 Min. | all |
| Image Auto Move | Use Select (▲▼) button to select the image move time.<br>Off/30/60/90/120/180 Min. | all |
| Reset | Push <MENU> button to return to factory default setting. | all |

## 6. Exit




Push <**MENU**>to exit the OSD menu.

# PC Timing

| Mode | Resolution | Horizontal Frequency | Vertical Frequency |
|---|---|---|---|
| 1 | 800*600@60 | 37.879 | 60.317 |
| 2 | 800*600@72 | 48.077 | 72.188 |
| 3 | 800*600@75 | 46.875 | 75.000 |
| 4 | 1024*768@60 | 48.363 | 60.004 |
| 5 | 1024*768@70 | 56.476 | 70.069 |
| 6 | 1024*768@75 | 60.023 | 75.029 |
| 7 | 1152*864@75 | 67.500 | 75.000 |
| 8 | 1280*1024@60 | 63.980 | 60.000 |

# LCD monitor Mounting Guide

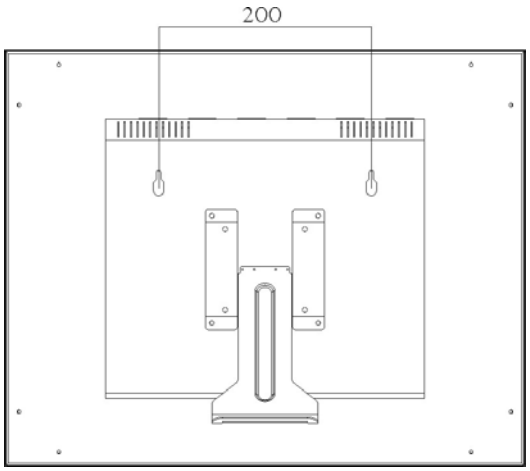
**A. Desktop**

Adjust the viewing angle of LCD to fit most comfortable monitoring status.

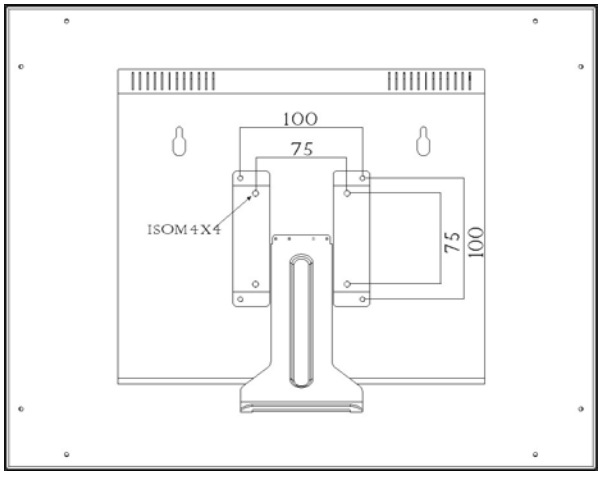
**B. Wall mount**

Free your space with wall mount design.

Please follow the fix-hole size in back panel to install the LCD to the wall.




**C. VESA Bracket**



# Specification

| | | | |
|---|---|---|---|
| LCD Panel | Screen size | 10.4” TFT LED | 12.1" TFT LCD |
| | Viewable Area(mm) | 211.2x158.4 | 304x228 |
| | Display Colours | 16.7M | 16.7M |
| | Screen ratio | 4:3 | |
| | Pixel | 800*600 | |
| | Brightness | 400nit(LED BL) | 400nit |
| | Contrast | 700:1 | 600:1 |
| | Response time | 35ms | |
| | View angle(U/D/L/R) | 60/80/80/80 | 50/60/70/70 |
| Video/Audio input | Video input x 1 | Composite( BNC ) x1 | |
| | S-Video input x 1 | 4 Pin Mini Dim x1 | |
| | Audio input x 1 | Audio-R/L ( RCA ) x 2 | |
| Video output | Video output x 1 | Composite( BNC ) x1 | |
| PC input | VGA input x 1 | RGB D-sub 15 pin x1 | |
| | Audio input x 1 | Phone jack , 3.5mm x1 | |
| Speakers | Built in x 2 | 2W , 8Ω x2 | |
| Compatibility | Video system | NTSC / PAL | |
| Electrical spec. | Power input | AC 100-240V 50/60Hz, Adapter DC 12V/5A | |
| | Power consumption | 9.6W | 14.2W |
| Environmental spec. | Operating conditions | 0~50°C / 10%-85% | |
| | Storage conditions | -20~60°C / 10%-85% | |
| Volume | Net Dimension(mm) | 266.2(W)x213.3(H)x58.4(D) | 300(W)x239(H)x61(D) |
| | Net Weight (KGS | 2.0KGS | 2.4KGS |

| | | |
|---|---|---|
| LCD Panel | Screen size | 19” TFT LED |
| | Viewable Area(mm) | 376.3x301 |
| | Display Colours | 16.7M |
| | Screen ratio | 5:4 |
| | Pixel | 1280*1024 |
| | Brightness | 250nit(LED BL) |
| | Contrast | 1000:1 |
| | Response time | 5ms |
| | View angle(U/D/L/R) | 75/85/85/85 |
| Video/Audio input | Video input x 1 | Composite( BNC ) x1 |
| | S-Video input x 1 | 4 Pin Mini Dim x1 |
| | Audio input x 1 | Audio-R/L ( RCA ) x 2 |
| Video output | Video output x 1 | Composite( BNC ) x1 |
| PC input | VGA input x 1 | RGB D-sub 15 pin x1 |
| | Audio input x 1 | Phone jack , 3.5ψ x1 |
| Speakers | Built in x 2 | 2W , 8Ω x2 |
| Compatibility | Video system | NTSC / PAL |
| Electrical spec. | Power input | AC 100-240V 50/60Hz, Adapter DC 12V/5A |
| | Power consumption | 24W |
| Environmental spec. | Operating conditions | 0~50°C / 10%-85% |
| | Storage conditions | -20~60°C / 10%-85% |
| Volume | Net Dimension(mm) | 429.8(W)x356.6(H)x65.7(D) |
| | Net Weight (KGS) | 4.8KGS |

# Appendixes

## Troubleshooting

The tables provided below include some problems that the user may encounter while using the display and the corresponding solutions. Please refer to the contents of this section prior to contacting service personnel.

| Problem | Possible Causes | Solutions |
|---|---|---|
| No picture | 1. Is the power cable connected to the unit?<br>2. Is the unit turned on?<br>3. Is the signal cable connected to the unit?<br>4. Is the unit in power saving mode? | 1. Make sure the power cable has been properly connected to the unit.<br>2. Turn on the unit.<br>3. Make sure the signal cable has been properly connected to the unit.<br>4. Press any key on computer keyboard. |
| Strange colour | 1. Is the signal cable connected to the unit? | 1. Make sure the signal cable has been properly connected to the unit. |
| Picture distortion | 1. Is the signal cable connected to the unit?<br>2. Is the video input signal within the unit's specified frequency range? | 1. Make sure the signal cable has been properly connected to the unit.<br>2. Make sure the input signal is within the unit's specified frequency range. |
| Picture is too dim | 1. Have the unit's brightness and contrast settings been set to the lowest level? | 1. Adjust brightness and contrast |
| Only sound but no picture | 1. Is the connection of the input signal correct? | 1. Check connection of input signal.<br>2. Make sure the signal cable has been properly connected. |
| Only picture but no sound | 1. Is the signal cable connected to the unit?<br>2. Has the volume been set to the min level?<br>3. Is the audio cable connected to the unit? | 1. Make sure the signal cable has been properly connected to the unit.<br>2. Adjust the volume to an appropriate setting.<br>3. Make sure the audio cable has been properly connected to the unit. |

Please contact the customer service centre of your local dealer if you have any questions regarding the unit after reading the information provided above.

## Package List

| | |
|---|---|
| A. LCD Monitor | x 1 |
| B. Power Cord | x 1 |
| C. User Manual | x 1 |
| D. 12V Power Adapter | x 1 |
| E. Remote Control | x 1 |
| F.VGA Cable (DB-15) | x 1 |